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14826A LANCE MISSILE NUMBER 4585 ROUND NUMBER 387 ACT
10 MAY 1983(U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM... D C KELLER MAY 83
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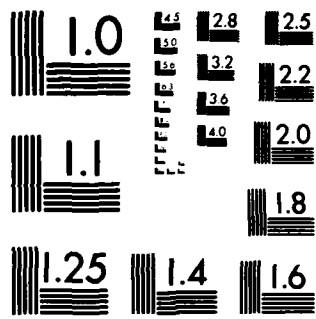
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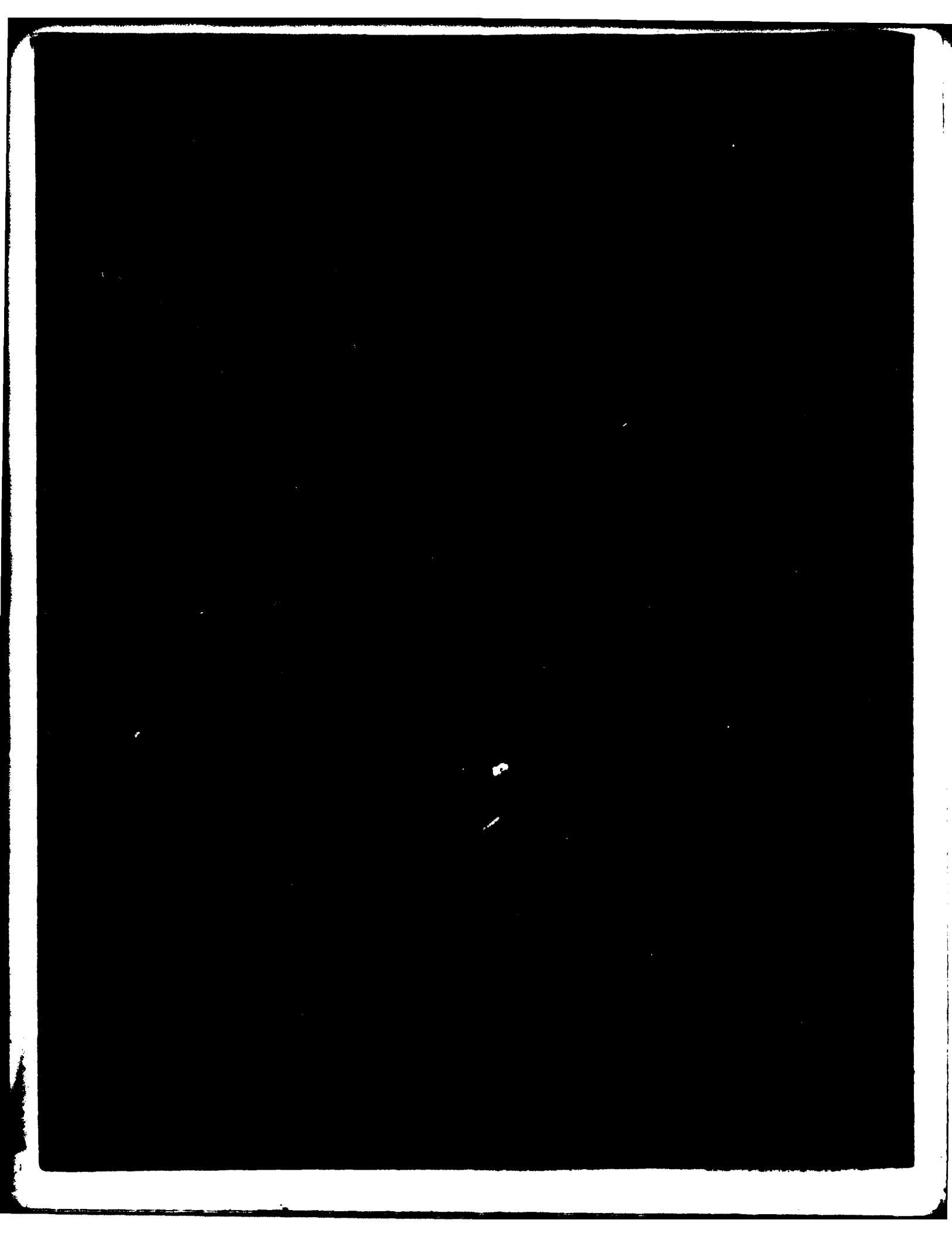
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MICROCOPY RESOLUTION TEST CHART
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.			
18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 14826A Lance, Missile Number 4585, Round Number 387 ACT are presented in tabular form.			

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INTRODUCTION

14826A Lance, Missile Number 4585, Round Number 387 ACT, was launched from LER-3, White Sands Missile Range (WSMR), New Mexico, at 1315:05 MDT, 10 May 83. The scheduled launch time was 1230 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the WSD Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE

LC-34 2760 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to high as possible feet in 500-foot increments.

SITE AND TIME

JALLEN 0800 MDT
JALLEN 1000 MDT
WSD 1315 MDT
NW-30 1100 MDT
JALLEN 1230 MDT



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WSMR METEOROLOGICAL SITES

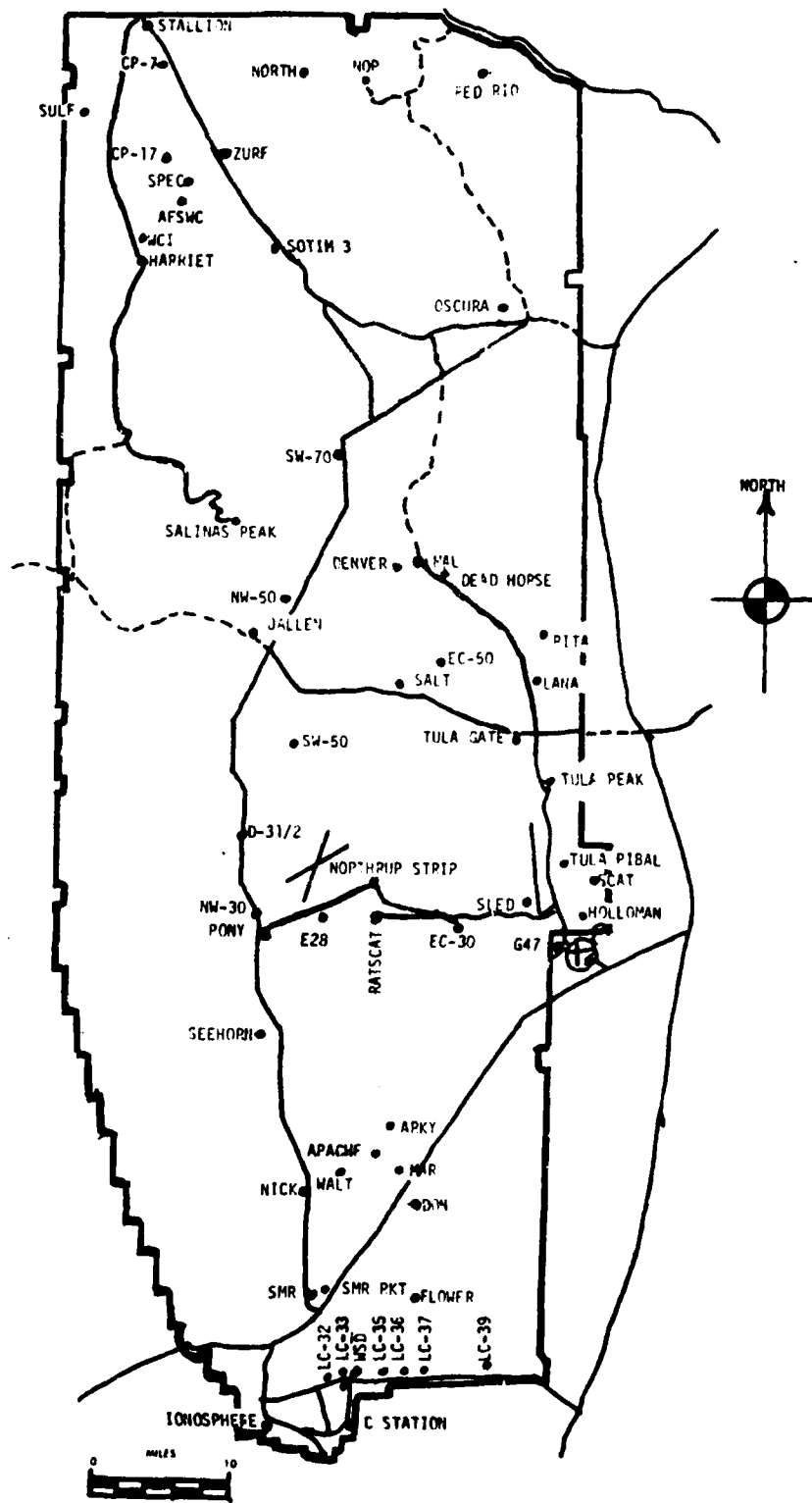


TABLE I

DSI
STATION

DATE 10 DAY May 1983

$$X = 488.717, 25 \quad Y = 184.862, 84 \quad H = 3993, 75$$
[illegible][illegible]

PSYCHOPHYSIC COMBINATION

TIME: MOT	1315	
DRY BULB TEMP.	29.5	
WET BULB TEMP.	13.4	
WET BULB DEPR.	16.1	
DEN POINT	0.3	
RELATIVE HUMID.	15	

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM LC-36 DATE 10 May 83 TIME 1259

COORDINATES (WSTM) X= 504,466.00 Y= 190,732.16 H= 4037.21

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____.

HEIGHTS ARE METERS AGL OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	195	05
60	209	07
120	216	10
180	212	11
240	216	14
300	220	15
360	232	14
420	234	14
480	233	14
540	229	14
600	238	13
660	248	18
720	245	17
780	250	17
840	240	13
900	238	12
960	236	14
1020	224	13
1080	227	12
1140	225	12
1200	221	13
1260	227	14
1320	211	13
1380	211	17
1440	200	14
1500	200	10
1560	200	12
1620	199	12

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-36 DATE 10 May 83 TIME 1315

COORDINATES (WSTM) X= 504,466.00 Y= 190,732.16 H= 4037.21

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____.

HEIGHTS ARE METERS AGL OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	260	05
60	215	08
120	189	11
180	198	10
240	207	10
300	200	08
360	225	09
420	220	08
480	215	09
540	214	07
600	209	08
660	202	07
720	236	08
780	250	10
840	245	03
900	249	04
960	235	06
1020	244	08
1080	244	08
1140	230	08
1200	227	13
1260	232	15
1320	226	09
1380	233	11
1440	223	11
1500	216	10
1560	191	08
1620	175	07

[illegible][illegible]

TABLE 4

COMPUTER MET MESSAGE DATA

10 May 1983

JALLEN 0800 MDT

METCM1332065

101400124872

00142005	28580872
01035002	28800862
02341001	28990837
03373002	28800798
04498017	28400752
05450013	28010708
06382014	27560666
07351020	27140625
08380028	26770587
09399026	26380551
10410027	25980516
11416028	25600483
12418028	25050437
13401032	24300380
14398036	23470330
15400046	22730285
16413058	22110245
17425053	21770209
18437043	22000179
19439040	21670153
20456033	21230131
21452048	20920111
22481028	21200095
23442017	21040081
24360004	21040069
25483011	21360059
26246008	21630050

JALLEN 1000 MDT

METCM1332065

101600124873

00000000	29420873
01302005	29340862
02335006	29170838
03406009	28910799
04411010	28480753
05407010	28010709
06342017	27560667
07345024	27190627
08391024	26940588
09393025	26560552
10393030	26130517
11397028	25700485
12412022	25080438
13399032	24350382
14392038	23540331
15403042	22730286
16408054	22180246
17410048	21860210
18448040	21940180
19436038	21780154
20425044	21530132
21436041	21140112
22452032	21060096
23434034	21130082
24404016	21050069
25533009	21390059
26281014	21720051

TABLE 4 Cont'd

COMPUTER MET MESSAGE DATA

10 May 83

WSD 1315 MDT

METCM1324064

101930122874

00373009 20500874
 01436014 30160864
 02450013 29600839
 03407017 29160801
 04418012 28630755
 05392008 28100711
 06348012 27640669
 07403023 27210629
 08392026 26950590
 09405029 26640554
 10432029 26300520
 11432028 25910487
 12430025 25280440
 13407028 24440384
 14404033 23620333
 15427042 22860288
 16433046 22350248
 17434043 21900212
 18439037 21870182
 19433048 21720156
 20443051 21370133
 21432045 21080113
 22424036 21100096
 23439023 21120082
 24368014 20960070
 25345008 21440060
 26325016 21750051

NW-30 1100 MDT

METCM1329065

101700122874

00409015 29920874
 01387012 29720864
 02396015 29490839
 03386016 29120801
 04357017 28590755
 05319011 28090711
 06332015 27610669
 07347017 27150628
 08387029 26820590
 09393034 26550553
 10399028 26250519
 11419026 25860486
 12419025 25250440
 13399032 24440383
 14400041 23630333
 15407044 22860287
 16414052 22280247
 17414055 21970212
 18442039 22000182
 19430047 21800156
 20429052 21390133
 21425050 21250113
 22440030 21350097
 23446027 21340082
 24427016 21090070
 25488003 21420060
 26269015 21870051

JALLEN 1230 MDT

METCM1332065

101850124872

00427016 29940872
 01313016 29790862
 02342018 29500837
 03392016 29140799
 04412020 28670753
 05395019 28150709
 06384021 27650667
 07379022 27150627
 08398025 26760589
 09410029 26470552
 10412029 26170518
 11418024 25790485
 12416028 25170438
 13409031 24290382
 14401038 23510331
 15410040 22830286
 16427040 22270246
 17429043 21900211
 18427037 21760180
 19420055 21690154
 20428047 21480132
 21440043 21230112
 22429032 21090096
 23444031 21330082
 24435027 21040070
 25410010 21330059
 26215014 21790051

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 83
ASCENSION NO. 72

SIGNIFICANT LEVEL DATA
1300030072
JALLEN
TABLE 5

GEODETIC COORDINATES
33.10712 LAT (NEG)
106.49511 LONG (NEG)

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE	TEMPERATURE	WFL. HUM.
MILLIBARS	MSL FEET	AIR	DEWPOINT	PERCENT
		DEGREES	CENTIGRADE	
872.0	4051.0	12.0	-3.0	35.0
868.0	4149.0	13.0	-3.7	31.0
850.5	4482.5	15.4	-5.0	24.0
850.0	4759.2	15.6	-5.4	23.0
839.1	5119.0	16.6	-4.6	23.0
819.5	5778.3	16.0	-5.7	22.0
700.0	10092.7	5.8	-11.7	27.0
630.2	12547.1	-1.0	-14.1	36.0
606.9	13850.9	-3.9	-17.4	34.0
581.1	14980.9	-6.2	-27.8	16.0
500.0	10780.4	-15.3	-32.6	21.0
430.3	22006.8	-22.5	-39.2	20.0
400.0	24194.7	-27.2	-42.3	22.0
327.2	28843.3	-39.0	-52.2	23.0
300.0	30782.6	-43.8		
250.0	34753.0	-50.9		
235.9	35989.2	-53.9		
214.3	38010.9	-56.0		
200.0	39459.3	-55.6		
180.9	40664.8	-53.2		
183.9	41234.3	-53.2		
170.0	41800.4	-52.6		
160.4	42980.1	-53.3		
150.0	45530.4	-57.3		
117.2	50600.4	-63.7		
105.4	52749.8	-64.5		
100.0	53013.2	-63.3		
92.5	55409.8	-59.2		
76.8	59211.0	-64.3		
70.0	61093.6	-62.0		
61.8	63639.2	-61.8		
57.8	65018.3	-58.4		
50.0	68043.0	-56.6		
45.6	69974.9	-56.3		
40.0	72738.6	-54.2		

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 83
ASCENDING NO. 72

UPPER AIR DATA
1300030072
JALLFIH
TABLE 6

GEODETIC COORDINATES
33-16712 LAT DEG
106-49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	872.0	12.0	35.0	1065.0	340.0	00.0	5.1	1.000260
4500.0	850.0	15.4	23.9	1033.9	362.4	00.2	3.0	1.000249
5000.0	842.7	16.3	23.0	1012.4	363.4	00.5	2.4	1.000245
5500.0	827.7	16.3	22.4	994.5	363.4	02.0	.9	1.000240
6000.0	812.9	15.5	22.3	979.4	362.5	232.4	.6	1.000236
6500.0	798.2	14.3	22.8	965.6	361.1	238.8	2.0	1.000232
7000.0	783.7	13.1	23.4	952.1	359.7	239.9	5.4	1.000228
7500.0	769.5	11.9	24.0	938.8	358.3	240.1	10.8	1.000225
8000.0	755.6	10.7	24.6	925.7	356.4	245.3	14.6	1.000221
8500.0	741.9	9.6	25.2	912.0	355.5	253.4	17.0	1.000218
9000.0	728.5	8.4	25.7	900.1	354.2	263.8	16.8	1.000214
9500.0	715.3	7.2	26.3	887.6	352.8	279.6	15.5	1.000211
10000.0	702.4	6.0	26.9	875.3	351.4	279.2	13.8	1.000207
10500.0	689.3	4.7	28.5	863.2	349.8	267.0	11.8	1.000204
11000.0	676.5	3.3	30.3	851.4	348.2	240.5	11.8	1.000201
11500.0	663.9	1.9	32.2	839.7	346.5	217.3	14.5	1.000198
12000.0	651.5	.5	34.0	828.3	344.9	206.6	16.0	1.000195
12500.0	639.3	-9.9	35.8	817.0	343.2	198.4	17.6	1.000192
13000.0	627.2	-2.0	35.3	804.9	341.9	197.1	19.6	1.000189
13500.0	615.3	-3.1	34.5	793.0	340.5	198.2	21.8	1.000185
14000.0	603.6	-4.2	31.7	781.1	339.2	204.3	25.0	1.000181
14500.0	592.0	-5.2	23.7	769.3	337.9	210.7	26.9	1.000177
15000.0	580.7	-6.2	16.0	757.6	336.6	217.5	28.4	1.000172
15500.0	569.3	-7.4	16.7	746.1	335.2	221.1	28.0	1.000169
16000.0	558.1	-8.6	17.3	734.6	333.7	224.0	27.2	1.000167
16500.0	547.2	-9.8	18.0	723.7	332.3	225.2	25.7	1.000164
17000.0	536.5	-11.0	19.7	712.8	330.8	226.0	24.0	1.000161
17500.0	526.0	-12.2	19.3	702.0	329.4	228.6	24.8	1.000159
18000.0	515.7	-13.4	20.0	691.5	327.9	231.0	26.0	1.000156
18500.0	505.6	-14.6	20.6	681.1	326.5	232.0	28.0	1.000154
19000.0	495.5	-15.8	20.9	670.6	325.1	232.9	29.2	1.000152
19500.0	485.5	-16.9	20.8	659.9	323.7	234.1	28.4	1.000149
20000.0	475.7	-18.0	20.6	649.4	322.3	235.9	27.5	1.000146
20500.0	466.1	-19.1	20.5	639.1	321.0	238.2	26.4	1.000144
21000.0	456.7	-20.3	20.3	629.0	319.6	238.8	26.3	1.000142
21500.0	447.5	-21.4	20.2	619.0	318.2	238.7	26.5	1.000139
22000.0	438.4	-22.5	20.0	609.2	316.8	235.6	26.6	1.000137
22500.0	429.4	-23.6	20.5	599.2	315.5	232.5	27.1	1.000135
23000.0	420.5	-24.6	20.9	589.3	314.2	230.6	29.0	1.000132
23500.0	411.8	-25.7	21.4	579.7	312.9	227.7	31.2	1.000130

STATION ALTITUDE 4551.00 F. T MSL
10 MAY 63
ASCENSION NO. 72 0800 MDT

UPPER AIR DATA
130003J07Z
JALLEN

GEODETIC COORDINATES
33.1212 LAT NEG
106.49511 LONG NEG

TABLE 6 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUMID. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
24000.0	403.3	-26.8	21.8	570.1	611.5	224.7	1.000128
24500.0	394.8	-28.0	22.1	560.6	610.0	223.9	1.000126
25000.0	386.3	-29.2	22.2	551.7	608.5	224.4	1.000124
25500.0	378.1	-30.5	22.3	542.7	606.9	226.4	1.000122
26000.0	370.0	-31.8	22.4	533.9	605.4	226.8	1.000120
26500.0	362.1	-33.1	22.5	525.3	603.7	226.7	1.000118
27000.0	354.3	-34.3	22.6	516.8	602.1	225.6	1.000116
27500.0	346.8	-35.6	22.7	508.5	600.5	224.6	1.000114
28000.0	339.3	-36.9	22.8	500.3	598.9	223.6	1.000112
28500.0	332.1	-38.1	22.9	492.2	597.3	223.5	1.000110
29000.0	324.9	-39.4	21.1**	484.2	595.7	223.9	1.000108
29500.0	317.7	-40.6	15.2**	476.0	594.1	224.2	1.000106
30000.0	310.7	-41.9	9.3**	468.0	592.5	224.4	1.000104
30500.0	303.8	-43.1	3.4**	460.1	590.9	224.3	1.000103
31000.0	297.0	-44.2		451.9	589.5	224.1	1.000101
31500.0	290.3	-45.1		443.4	588.3	224.0	1.000099
32000.0	283.7	-46.0		435.0	587.2	224.3	1.000097
32500.0	277.2	-46.9		426.8	586.0	225.5	1.000095
33000.0	271.0	-47.8		418.8	584.9	226.8	1.000093
33500.0	264.8	-48.7		410.9	583.7	228.4	1.000092
34000.0	258.8	-49.6		403.2	582.5	229.9	1.000090
34500.0	252.9	-50.4		395.6	581.4	231.4	1.000088
35000.0	247.1	-51.5		388.4	580.0	232.8	1.000087
35500.0	241.4	-52.7		381.5	578.4	233.5	1.000085
36000.0	235.8	-53.9		374.6	576.8	234.1	1.000083
36500.0	230.2	-54.4		368.7	576.2	234.8	1.000082
37000.0	224.8	-54.9		359.0	575.5	235.6	1.000080
37500.0	219.6	-55.5		351.4	574.8	237.1	1.000078
38000.0	214.4	-56.0		344.0	574.1	238.5	1.000077
38500.0	209.4	-55.9		335.7	574.3	239.6	1.000075
39000.0	204.4	-55.7		327.5	574.4	240.0	1.000073
39500.0	199.6	-55.5		319.5	574.7	239.7	1.000071
40000.0	194.9	-54.5		310.6	576.0	239.9	1.000069
40500.0	190.4	-53.5		302.0	577.3	240.5	1.000067
41000.0	185.9	-53.2		294.5	577.8	241.8	1.000066
41500.0	181.6	-52.9		287.3	578.1	245.0	1.000064
42000.0	177.4	-52.7		280.3	578.4	247.1	1.000062
42500.0	173.3	-53.0		274.2	578.0	246.4	1.000061
43000.0	169.2	-53.3		268.2	577.6	246.2	1.000060
43500.0	165.3	-54.1		262.8	576.8	246.5	1.000059

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 63
ASCENSION NO. 72

UPPER AIR DATA
13000307Z
JALLEN

GEODETTIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 6 Cont'd

GEODETTIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
44000.0	161.4	-54.9	257.6	575.5	246.9	41.3	1.000057
44500.0	157.6	-55.7	252.4	574.5	247.6	37.4	1.000056
45000.0	153.9	-56.5	247.4	573.5	248.7	34.5	1.000055
45500.0	150.3	-57.2	242.5	572.4	250.1	32.2	1.000054
46000.0	146.7	-57.9	237.5	571.6	252.7	30.1	1.000053
46500.0	143.1	-58.5	232.3	570.8	256.7	28.3	1.000052
47000.0	139.7	-59.1	227.4	569.9	258.9	28.3	1.000051
47500.0	136.3	-59.8	222.6	569.1	257.1	31.2	1.000050
48000.0	133.1	-60.4	217.9	568.2	255.9	33.7	1.000049
48500.0	129.9	-61.0	213.3	567.4	255.4	35.0	1.000048
49000.0	126.7	-61.7	208.8	566.5	255.0	36.0	1.000046
49500.0	123.7	-62.3	204.4	565.7	254.7	36.4	1.000046
50000.0	120.7	-62.9	200.0	564.8	254.6	36.7	1.000045
50500.0	117.8	-63.6	195.8	564.0	255.7	36.7	1.000044
51000.0	114.9	-63.8	191.3	563.6	256.6	37.6	1.000043
51500.0	112.1	-64.0	186.8	563.4	256.3	43.8	1.000042
52000.0	109.4	-64.2	182.4	563.1	256.0	50.1	1.000041
52500.0	106.7	-64.4	178.1	562.9	253.1	58.7	1.000040
53000.0	104.1	-64.2	173.6	563.1	250.8	67.7	1.000039
53500.0	101.6	-63.7	168.9	563.9	253.1	59.8	1.000038
54000.0	99.1	-62.8	164.1	565.0	258.7	46.7	1.000037
54500.0	96.7	-61.5	159.2	566.7	268.0	33.7	1.000035
55000.0	94.4	-60.3	154.4	568.4	287.0	22.1	1.000034
55500.0	92.1	-59.3	150.0	569.7	312.7	16.0	1.000033
56000.0	89.9	-60.0	146.9	568.8	298.2	12.4	1.000033
56500.0	87.7	-60.7	143.8	567.4	274.9	10.1	1.000032
57000.0	85.6	-61.3	140.7	567.0	263.7	10.8	1.000031
57500.0	83.5	-62.0	137.0	566.1	254.4	11.9	1.000031
58000.0	81.5	-62.7	134.9	565.2	252.2	14.2	1.000030
58500.0	79.5	-63.3	132.0	564.3	252.3	16.8	1.000029
59000.0	77.6	-64.0	129.3	563.4	250.1	18.2	1.000029
59500.0	75.7	-63.9	126.1	563.5	244.1	17.6	1.000028
60000.0	73.9	-63.3	122.7	564.3	237.8	17.3	1.000027
60500.0	72.1	-62.7	119.3	565.1	229.8	14.3	1.000027
61000.0	70.3	-62.1	116.1	565.9	218.1	11.8	1.000026
61500.0	68.6	-62.0	113.2	566.1	215.7	10.4	1.000025
62000.0	67.0	-61.9	110.4	566.2	222.1	9.6	1.000025
62500.0	65.3	-61.5	107.8	566.2	232.2	8.7	1.000024
63000.0	63.8	-61.9	105.1	566.3	256.6	7.7	1.000023
63500.0	62.2	-61.8	102.6	566.4	282.1	8.3	1.000023

STATION ALTITUDE 4051.00 FEET ASL
10 MAY 73 0800 MDT
ASCENSION NO. 72

UPPER AIR DATA
1300030072
JALLEN

GEODETIC COORDINATES
33.1.712 LAT DEG
106.49511 LONG DEG

TABLE 6 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES, CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
64000.0	60.7	-60.9		99.7	567.4	293.9	1.000022
64500.0	59.3	-59.7		96.7	564.2	304.1	1.000022
65000.0	57.9	-58.4		93.9	570.4	310.0	1.000021
65500.0	56.5	-58.1		91.5	571.4	311.8	1.000020
66000.0	55.1	-57.8		89.2	571.7	316.4	1.000020
66500.0	53.8	-57.5		87.0	572.1	70.6	1.000019
67000.0	52.6	-57.2		84.8	572.5	108.8	1.000019
67500.0	51.3	-56.9		82.7	572.9	117.7	1.000018
68000.0	50.1	-56.6		80.6	573.3	123.8	1.000018
68500.0	48.9	-56.5		78.7	573.4	128.7	1.000017
69000.0	47.8	-56.5		76.8	573.5	140.8	1.000017
69500.0	46.6	-56.4		75.0	573.6	161.9	1.000017
70000.0	45.5	-56.3		73.2	573.7	167.1	1.000016
70500.0	44.5	-55.9		71.3	574.2	172.3	1.000016
71000.0	43.4	-55.5		69.5	574.7		1.000015
71500.0	42.4	-55.1		67.6	575.2		1.000015
72000.0	41.4	-54.8		66.1	575.7		1.000015
72500.0	40.5	-54.4		64.4	576.2		1.000014

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 63 0800 MDT
ASCENSION NO. 72

MANDATORY LEVELS
1300030072
JALLEN
TABLE 7

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TH)	SPEED KNOTS
850.0	4756.	15.6	-5.4	23.	40.3	3.0
800.0	6443.	14.4	-6.5	23.	238.6	1.9
750.0	8216.	10.3	-9.0	25.	249.2	15.6
700.0	10083.	5.8	-11.7	27.	277.3	15.4
650.0	12053.	.3	-13.6	34.	205.6	10.2
600.0	14140.	-4.5	-19.7	29.	205.8	25.9
550.0	16366.	-9.5	-29.4	14.	225.0	25.1
500.0	18755.	-15.3	-32.6	21.	232.4	29.0
450.0	21338.	-21.1	-37.9	20.	238.7	20.4
400.0	24156.	-27.2	-42.3	22.	224.4	33.2
350.0	27262.	-35.0	-48.8	23.	225.1	33.0
300.0	30724.	-43.8			224.2	43.2
250.0	34680.	-50.0			232.1	50.9
200.0	39368.	-55.6			239.7	55.6
175.0	42185.	-52.9			246.7	41.2
150.0	45419.	-57.3			250.2	32.1
125.0	49160.	-62.0			254.8	30.2
100.0	53651.	-63.3			256.0	52.2
80.0	58196.	-63.2			252.3	10.1
70.0	60889.	-62.0			210.1	11.5
60.0	64021.	-60.3			298.3	8.3
50.0	67792.	-56.6			124.0	10.0
40.0	72454.	-54.2				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 63
ASCENSION NO. 73 1000 MDT

SIGNIFICANT LEVEL DATA
1300030073
JALLFH

GEODETTIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

TABLE 3

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEW POINT DEGREES CENTIGRADE	WIND DIRECTION PERCENT
872.5	4051.0	20.2	-2.2	22.0
871.5	4083.5	22.1	-1.2	21.0
864.3	4318.5	19.4	-4.8	19.0
850.0	4787.9	18.2	-5.1	20.0
825.5	5608.5	17.8	-5.4	20.0
755.3	8073.4	11.5	-8.9	23.0
700.0	10137.0	5.5	-12.4	26.0
632.9	12808.6	-1.5	-15.6	33.0
605.9	13947.5	-2.5	-24.8	16.0
570.9	15490.4	-5.4	-27.2	16.0
500.0	18354.5	-14.2	-35.2	18.0
447.5	21583.1	-21.5	-39.4	18.0
400.0	24274.0	-27.1	-43.1	20.0
324.4	29123.5	-38.9	-52.8	21.0
300.0	30871.9	-43.6		
274.5	32819.9	-47.9		
250.0	34838.0	-50.8		
228.7	36735.7	-53.7		
200.7	38567.2	-54.9		
200.0	39565.1	-54.7		
176.8	42173.7	-53.2		
150.0	45643.8	-55.8		
132.0	48317.2	-57.4		
110.8	50322.4	-60.8		
104.4	53131.5	-62.9		
100.0	54007.6	-62.3		
96.4	56983.2	-62.8		
76.6	59443.1	-60.8		
70.0	61281.0	-63.6		
60.8	64156.0	-60.8		
57.1	65450.7	-57.2		
52.0	67091.8	-57.4		
50.0	68234.6	-55.4		
44.2	70842.0	-53.9		

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 53 1000 MDT
ASCENSI.N NO. 73

UNPL. AIR DATA
1300030073
JALLEN

ODIETIC CO-ORDINATES
13-14.712 LAT DEG
106-49511 LON DEG

TABLE 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUMID. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
4051.0	872.5	20.2	-2.2	22.0	1033.8	668.0	.0	1.000253
4500.0	850.7	18.9	-4.9	10.0	1022.3	666.4	215.8	1.000247
5000.0	840.6	18.1	-5.2	20.0	1007.2	665.5	215.8	1.000243
5500.0	820.7	17.9	-5.4	20.0	990.2	665.2	215.8	1.000239
6000.0	813.9	16.8	-6.0	20.5	976.1	664.0	217.0	1.000235
6500.0	799.4	15.5	-6.6	21.1	963.0	662.5	225.6	1.000231
7000.0	785.1	14.2	-7.3	21.7	950.1	661.0	230.2	1.000228
7500.0	771.1	13.0	-8.0	22.3	937.3	659.4	231.2	1.000224
8000.0	757.3	11.7	-8.8	22.0	924.8	658.0	231.8	1.000221
8500.0	743.5	10.3	-9.6	23.6	912.6	656.3	232.0	1.000217
9000.0	729.9	8.8	-10.4	24.3	900.6	654.6	231.5	1.000214
9500.0	716.6	7.4	-11.3	25.1	888.0	652.9	230.7	1.000210
10000.0	703.5	5.9	-12.2	25.8	877.2	651.2	222.4	1.000207
10500.0	690.5	4.5	-12.8	27.0	865.1	649.6	212.4	1.000204
11000.0	677.6	3.2	-13.4	28.3	853.0	648.1	200.0	1.000201
11500.0	664.9	1.9	-14.0	29.6	841.1	646.5	191.8	1.000198
12000.0	652.5	.6	-14.6	30.0	829.3	645.0	198.7	1.000195
12500.0	640.3	-7	-15.2	32.2	817.8	643.4	189.2	1.000192
13000.0	626.3	-1.7	-16.9	30.1	805.4	642.2	193.1	1.000188
13500.0	616.4	-2.1	-20.6	22.7	791.6	641.6	200.9	1.000182
14000.0	604.7	-2.6	-24.9	16.0	778.2	641.0	210.2	1.000178
14500.0	593.1	-3.5	-25.7	16.0	766.0	639.8	217.2	1.000175
15000.0	581.8	-4.5	-26.4	16.0	754.0	638.7	220.9	1.000172
15500.0	570.7	-5.4	-27.2	16.0	742.3	637.6	220.5	1.000169
16000.0	559.5	-6.7	-28.1	16.3	731.4	636.0	219.8	1.000166
16500.0	548.6	-8.0	-29.0	16.6	720.6	634.4	219.0	1.000164
17000.0	537.9	-9.3	-29.9	16.0	710.1	632.8	219.8	1.000161
17500.0	527.4	-10.7	-30.6	17.2	699.7	631.3	220.5	1.000158
18000.0	517.1	-12.0	-31.7	17.5	689.5	629.7	221.4	1.000156
18500.0	507.0	-13.3	-32.6	17.8	679.5	628.1	222.3	1.000154
19000.0	497.1	-14.6	-33.6	18.0	669.5	626.5	223.2	1.000151
19500.0	487.0	-15.9	-34.7	18.0	659.5	624.9	224.5	1.000149
20000.0	477.2	-17.3	-35.8	18.0	649.6	623.3	226.9	1.000146
20500.0	467.6	-18.6	-36.9	18.0	639.9	621.6	229.3	1.000144
21000.0	458.2	-19.9	-38.1	18.0	630.3	620.0	230.5	1.000142
21500.0	449.0	-21.3	-39.2	18.0	620.9	618.3	231.5	1.000140
22000.0	439.8	-22.4	-39.9	18.3	610.8	617.0	232.2	1.000137
22500.0	430.7	-23.4	-40.6	18.7	600.7	615.7	232.1	1.000135
23000.0	421.8	-24.4	-41.3	19.1	590.8	614.4	231.5	1.000133
23500.0	413.1	-25.5	-42.0	19.4	581.0	613.1	230.8	1.000130

GEODETIC COORDINATES
33.12712 LAT DEG
106.49511 LON DEG

UPPER AIR DATA
1300030075
JALLEN

TABLE 9 Cont'd

STATION ALTITUDE 4051.00 F. T MSL
10 MAY 63
ASCENSION NO. 73

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES C	TEMPERATURE DEGREES C	REL. HUM. PERCENT	DENSITY GM/CM ³	WIND DIRECTION DEGREES (TN)	WIND DATA KNOTS	INDEX OF REFRACTION
24000.0	404.6	-26.5	-42.7	19.8	571.4	611.4	230.2	1.000128
24500.0	396.1	-27.6	-43.0	20.0	562.0	610.4	229.2	1.000126
25000.0	387.7	-28.9	-44.6	20.1	552.8	608.4	227.4	1.000124
25500.0	379.4	-30.1	-45.6	20.3	543.7	607.4	224.0	1.000122
26000.0	371.3	-31.3	-46.6	20.4	534.7	605.4	220.9	1.000120
26500.0	363.3	-32.5	-47.6	20.5	525.9	604.4	217.7	1.000118
27000.0	355.6	-33.7	-48.6	20.6	517.3	602.4	217.3	1.000116
27500.0	348.0	-34.9	-49.6	20.7	508.9	601.4	217.4	1.000114
28000.0	340.5	-36.2	-50.6	20.8	500.5	599.7	218.5	1.000112
28500.0	333.3	-37.4	-51.6	20.9	492.4	598.2	219.7	1.000110
29000.0	326.1	-38.6	-52.6	21.0	484.4	596.7	221.1	1.000108
29500.0	319.0	-39.9	-53.7	16.5**	476.4	595.0	222.3	1.000106
30000.0	311.9	-41.3	-54.7	10.5**	468.6	593.3	223.3	1.000104
30500.0	305.0	-42.6	-55.7	4.5**	460.9	591.5	223.6	1.000103
31000.0	298.3	-43.9	-56.7		453.2	589.9	223.3	1.000101
31500.0	291.5	-45.0			445.1	588.5	224.9	1.000099
32000.0	285.0	-46.1			437.2	587.0	227.0	1.000097
32500.0	278.5	-47.2			429.4	585.6	228.7	1.000096
33000.0	272.2	-48.2			421.5	584.4	230.1	1.000094
33500.0	266.0	-48.9			413.2	583.4	230.4	1.000092
34000.0	259.9	-49.6			405.0	582.5	230.5	1.000090
34500.0	253.9	-50.3			397.0	581.0	230.4	1.000088
35000.0	248.1	-51.0			389.2	580.6	229.8	1.000087
35500.0	242.4	-51.8			381.4	579.6	229.0	1.000085
36000.0	236.7	-52.6			373.9	578.6	229.3	1.000083
36500.0	231.2	-53.3			366.5	577.6	229.8	1.000082
37000.0	225.9	-53.9			358.8	576.9	230.2	1.000080
37500.0	220.6	-54.2			350.9	576.5	230.5	1.000078
38000.0	215.4	-54.5			343.2	576.0	229.9	1.000076
38500.0	210.4	-54.9			335.7	575.6	229.7	1.000075
39000.0	205.4	-54.8			327.8	575.7	230.5	1.000073
39500.0	200.6	-54.7			319.9	575.8	232.5	1.000071
40000.0	195.9	-54.4			312.1	575.1	235.6	1.000070
40500.0	191.4	-54.2			304.4	574.5	241.0	1.000068
41000.0	186.9	-53.9			296.9	573.9	248.8	1.000066
41500.0	182.5	-53.6			289.6	573.3	254.0	1.000064
42000.0	178.3	-53.3			282.5	572.6	258.5	1.000063
42500.0	174.1	-53.4			276.0	571.5	257.4	1.000061
43000.0	170.0	-53.8			270.0	571.0	254.2	1.000060
43500.0	166.0	-54.2			264.2	570.5	253.1	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 63
ASCENSION NO. 73

UPPER AIR DATA
1300030073
JALLEN

6 OPTIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	162.1	-54.6		258.4	576.0	252.6	34.9	1.000054
44500.0	158.4	-54.9		252.8	573.5	250.8	34.5	1.000056
45000.0	154.6	-55.3		247.3	575.0	248.2	34.4	1.000055
45500.0	151.0	-55.7		241.9	574.5	243.0	38.1	1.000054
46000.0	147.5	-56.0		236.6	574.1	238.3	43.1	1.000053
46500.0	144.0	-56.3		231.3	573.7	236.2	46.4	1.000052
47000.0	140.6	-56.6		226.2	573.3	234.6	49.2	1.000050
47500.0	137.3	-56.9		221.1	572.9	235.4	48.0	1.000049
48000.0	134.0	-57.2		216.2	572.5	237.6	44.4	1.000048
48500.0	130.8	-57.7		211.6	571.8	240.3	41.9	1.000047
49000.0	127.7	-58.6		207.3	570.7	243.4	41.0	1.000046
49500.0	124.7	-59.4		203.2	569.6	246.4	40.2	1.000045
50000.0	121.7	-60.3		199.1	568.4	248.7	37.9	1.000044
50500.0	118.8	-60.9		195.0	567.5	251.3	35.8	1.000043
51000.0	115.9	-61.3		190.6	567.0	252.4	34.4	1.000042
51500.0	113.1	-61.7		186.3	566.5	253.0	33.2	1.000041
52000.0	110.3	-62.1		182.1	566.0	252.6	33.2	1.000041
52500.0	107.7	-62.4		178.0	565.5	250.4	35.3	1.000040
53000.0	105.1	-62.8		174.0	565.0	248.5	37.4	1.000039
53500.0	102.5	-62.6		169.7	565.2	248.3	37.1	1.000038
54000.0	100.0	-62.3		165.3	565.7	248.1	36.8	1.000037
54500.0	97.6	-62.4		161.3	565.6	247.6	36.9	1.000036
55000.0	95.2	-62.5		157.5	565.5	247.0	37.1	1.000035
55500.0	92.9	-62.6		153.7	565.4	246.4	37.7	1.000034
56000.0	90.7	-62.6		150.1	565.2	245.6	38.9	1.000033
56500.0	88.5	-62.7		146.5	565.1	244.8	39.8	1.000033
57000.0	86.3	-62.8		143.0	565.0	243.9	39.6	1.000032
57500.0	84.2	-62.4		139.2	565.8	243.1	39.5	1.000031
58000.0	82.2	-62.0		135.6	566.1	243.2	36.1	1.000030
58500.0	80.2	-61.6		132.1	566.7	243.5	32.4	1.000029
59000.0	78.3	-61.2		128.6	567.2	243.3	28.0	1.000029
59500.0	76.4	-60.9		125.4	567.6	242.4	23.0	1.000028
60000.0	74.5	-61.6		122.8	566.6	241.3	19.3	1.000027
60500.0	72.7	-62.4		120.2	565.5	240.6	18.6	1.000027
61000.0	71.0	-63.2		117.7	564.5	240.0	17.9	1.000026
61500.0	69.3	-63.8		115.0	564.2	243.3	17.8	1.000026
62000.0	67.6	-62.9		112.0	564.9	246.7	17.8	1.000025
62500.0	65.9	-62.4		109.0	565.5	247.6	17.2	1.000024
63000.0	64.3	-61.9		106.1	566.2	247.4	16.5	1.000024
63500.0	62.8	-61.4		103.3	566.8	250.0	14.4	1.000023

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 83
ASCENSION NO. 73

UPPER AIR DATA
13000300Z
JALLEN

GEODETIC COORDINATES
33.14712 LAT DEG
106.49511 LONG DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED KNOTS	WIND DATA		INFLX OF REFRACTION
		AIR DEGREE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
64000.0	61.3	-11.0			100.6	567.4	258.9	10.7	1.000022
64500.0	59.8	-59.0			97.7	569.0	276.6	7.1	1.000022
65000.0	58.4	-58.5			94.7	570.4	332.1	4.2	1.000021
65500.0	57.0	-57.2			91.9	572.5	25.1	7.4	1.000020
66000.0	55.6	-57.3			89.8	574.4	55.7	6.0	1.000020
66500.0	54.3	-57.3			87.7	572.3	100.2	6.2	1.000020
67000.0	53.0	-57.4			85.6	572.2	131.3	9.1	1.000019
67500.0	51.8	-56.7			83.3	573.2	147.8	13.3	1.000019
68000.0	50.6	-55.8			81.0	574.3	155.5	16.7	1.000018
68500.0	49.4	-55.2			78.9	575.1	160.6	16.4	1.000018
69000.0	48.2	-55.0			77.0	575.5	165.8	16.2	1.000017
69500.0	47.1	-54.7			75.1	575.4			1.000017
70000.0	46.0	-54.4			73.2	576.2			1.000016
70500.0	44.9	-54.1			71.4	576.4			1.000016

STATION ALTITUDE 4051.00 F-FT MSL
10 MAY 83
ASCENSION NO. 73 1000 MDT

MANDATORY LEVELS
1300030075
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 10

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FLEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4785.	18.2	-5.1	20.	215.8	3.0
800.0	6480.	15.6	-6.6	21.	225.3	8.9
750.0	8260.	10.9	-9.2	23.	231.9	10.0
700.0	10128.	5.5	-12.4	26.	219.6	11.0
650.0	12006.	.4	-14.7	31.	188.1	19.5
600.0	14187.	-3.0	-25.2	16.	212.9	24.1
550.0	16428.	-7.0	-28.9	17.	219.0	24.8
500.0	18829.	-14.2	-33.2	18.	222.9	30.5
450.0	21417.	-21.1	-39.1	18.	231.4	20.1
400.0	24235.	-27.1	-43.1	20.	229.7	29.1
350.0	27345.	-34.6	-49.3	21.	217.3	36.3
300.0	30813.	-43.6			223.4	40.9
250.0	34765.	-50.8			230.1	51.7
200.0	39473.	-54.7			232.9	40.3
175.0	42287.	-53.4			258.2	36.9
150.0	45524.	-55.8			241.8	39.3
125.0	49309.	-59.3			246.1	40.4
100.0	53845.	-62.3			248.1	36.8
80.0	58364.	-61.5			243.6	32.2
70.0	61075.	-63.6			241.7	17.8
60.0	64202.	-60.0			271.7	8.0
50.0	67983.	-55.4			157.6	10.5

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET SL
10 MAY 63
ASCENSION NO. 225

SIGNIFICANT LEVEL DATA
130020Z25
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 11

PRESSURE OF ONE INCH ALTITUDE MILLIHARS MSL FEET	TEMPERATURE AIR JEMPUTU DEGREES CENTIGRADE	REL. HUM. PERCENT
673.5	23.5	15.0
3089.0	23.2	15.0
857.0	-4.8	25.0
4776.4	-12.4	22.0
700.0	6.1	22.0
10161.3	-1.8	14.0
623.8	-3.7	17.0
13133.4	-9.8	16.0
590.4	-12.6	16.0
14650.2	-26.3	16.0
521.6	-32.3	16.0
17819.9	-30.1	16.0
500.0	-42.9	16.0
18890.9	-45.3	16.0
400.0	-59.3	16.0
24352.2	-55.2	16.0
361.9	-54.7	16.0
26705.0	-53.5	16.0
321.3	-56.6	16.0
29429.0	-61.6	16.0
300.0	-63.1	16.0
30964.5	-61.8	16.0
283.7	-62.9	16.0
32198.5	-60.5	16.0
250.0	-64.2	16.0
34953.3	-64.4	16.0
214.9	-58.8	16.0
38147.9	-59.3	16.0
200.0	-55.1	16.0
39645.0	-53.5	16.0
183.1	-54.2	16.0
41504.4	-56.6	16.0
177.6	-61.6	16.0
42149.3	-63.1	16.0
150.0	-61.8	16.0
45706.0	-62.9	16.0
121.1	-60.5	16.0
50130.8	-64.2	16.0
107.5	-64.4	16.0
52557.2	-58.8	16.0
100.0	-59.3	16.0
54029.7	-55.1	16.0
83.1	-53.5	16.0
57802.0	-54.2	16.0
80.1	-56.6	16.0
58553.7	-61.6	16.0
70.0	-63.1	16.0
61301.1	-61.8	16.0
65.8	-62.9	16.0
62551.0	-60.5	16.0
63.7	-64.2	16.0
63214.7	-64.4	16.0
59.1	-58.8	16.0
64767.1	-59.3	16.0
50.0	-55.1	16.0
60261.1	-53.5	16.0
45.8	-54.2	16.0
70119.5	-56.6	16.0
41.6	-61.6	16.0
72161.4	-63.1	16.0
38.2	-61.8	16.0
73976.4	-62.9	16.0
30.0	-60.5	16.0
79170.9	-64.2	16.0
22.6	-64.4	16.0
85333.1	-58.8	16.0
	-59.3	16.0
	-55.1	16.0
	-53.5	16.0
	-54.2	16.0
	-56.6	16.0
	-61.6	16.0
	-63.1	16.0
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	-62.9	16.0
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	-64.4	16.0
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	-55.1	16.0
	-53.5	16.0
	-54.2	16.0
	-56.6	16.0
	-61.6	16.0
	-63.1	16.0
	-61.8	16.0
	-62.9	16.0
	-60.5	16.0
	-64.2	16.0
	-64.4	16.0
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	-59.3	16.0
	-55.1	16.0
	-53.5	16.0
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	-61.6	16.0
	-63.1	16.0
	-61.8	16.0
	-62.9	16.0
	-60.5	16.0
	-64.2	16.0
	-64.4	16.0
	-58.8	16.0
	-59.3	16.0
	-55.1	16.0
	-53.5	16.0
	-54.2	16.0
	-56.6	16.0
	-61.6	16.0
	-63.1	16.0
	-61.8	16.0
	-62.9	16.0
	-60.5	16.0
	-64.2	16.0
	-64.4	16.0
	-58.8	16.0
	-59.3	16.0
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	-53.5	16.0
	-54.2	16.0
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	-64.4	16.0
	-58.8	16.0
	-59.3	16.0
	-55.1	16.0
	-53.5	16.0
	-54.2	16.0
	-56.6	16.0
	-61.6	16.0
	-63.1	16.0
	-61.8	16.0
	-62.9	16.0
	-60.5	16.0
	-64.2	16.0
	-64.4	16.0
	-58.8	16.0
	-59.3	16.0
	-55.1	16.0
	-53.5	16.0
	-54.2	16.0
	-56.6	16.0
	-61.6	16.0
	-63.1	16.0
	-61.8	16.0
	-62.9	16.0
	-60.5	16.0
	-64.2	16.0
	-64.4	16.0
	-58.8	16.0

STATION ALTITUDE 3989.00 FEET MSL
10 MAY 63
ASCENSION NO. 4.5

UPPER AIR DATA
130002Z/25
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE HILLIARS	AIR TEMPERATURE DEGREES, CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
3989.0	873.5	29.5	15.0	1002.8	678.7	210.0	1.000249
4000.0	873.2	29.4	15.0	1002.7	678.5	210.2	1.000249
4500.0	850.2	25.4	15.0	999.2	673.9	210.6	1.000243
5000.0	843.2	22.5	15.4	991.7	670.5	224.9	1.000239
5500.0	820.1	20.9	16.3	979.3	668.7	229.7	1.000236
6000.0	813.3	19.3	17.3	967.0	666.8	233.5	1.000233
6500.0	790.8	17.7	18.2	953.0	663.0	234.0	1.000229
7000.0	784.5	16.1	19.1	943.1	663.2	231.7	1.000226
7500.0	770.5	14.6	20.1	931.4	661.3	229.0	1.000223
8000.0	750.7	13.0	21.0	919.9	659.5	226.0	1.000219
8500.0	733.2	11.4	21.9	908.6	657.6	221.8	1.000216
9000.0	724.9	9.8	22.8	897.4	655.8	216.8	1.000213
9500.0	710.9	8.2	23.8	886.4	653.9	211.9	1.000210
10000.0	704.1	6.6	24.7	875.6	652.0	211.5	1.000207
10500.0	691.1	5.2	24.7	863.9	650.4	211.2	1.000203
11000.0	670.2	3.9	24.2	852.0	648.8	210.1	1.000199
11500.0	665.5	2.5	23.6	840.2	647.2	209.2	1.000196
12000.0	653.1	1.2	23.1	828.5	645.6	214.8	1.000192
12500.0	640.9	-1.1	22.6	817.1	644.0	219.9	1.000189
13000.0	629.0	-1.4	22.1	805.8	642.4	225.7	1.000186
13500.0	617.1	-2.3	20.1	793.0	641.4	225.1	1.000182
14000.0	605.3	-2.9	17.4	779.8	640.6	223.0	1.000178
14500.0	593.8	-3.5	14.8	760.9	639.9	221.2	1.000174
15000.0	582.4	-4.4	14.0	754.6	638.8	221.2	1.000171
15500.0	571.2	-5.3	14.0	742.7	637.7	223.8	1.000168
16000.0	560.1	-6.3	14.0	731.0	636.5	227.6	1.000166
16500.0	549.3	-7.3	14.0	719.5	635.4	232.2	1.000163
17000.0	538.7	-8.2	14.0	708.2	634.2	236.2	1.000160
17500.0	528.3	-9.2	14.0	697.1	633.0	239.0	1.000158
18000.0	518.1	-10.3	14.2	686.4	631.7	241.8	1.000155
18500.0	507.9	-11.6	14.6	676.3	630.2	243.1	1.000153
19000.0	497.9	-12.9	15.0	666.2	628.6	243.1	1.000150
19500.0	487.8	-14.1	15.1	655.9	627.1	243.1	1.000148
20000.0	477.9	-15.4	15.2	645.8	625.6	243.0	1.000145
20500.0	468.3	-16.6	15.3	635.8	624.0	242.9	1.000143
21000.0	458.8	-17.9	15.4	626.0	622.5	242.8	1.000141
21500.0	449.5	-19.1	15.5	616.4	621.0	242.3	1.000139
22000.0	440.4	-20.4	15.6	606.9	619.4	241.7	1.000136
22500.0	431.5	-21.6	15.7	597.6	617.9	240.6	1.000134
23000.0	422.7	-22.9	15.8	588.4	616.3	238.4	1.000132

STATION ALTITUDE 3089.00 FEET MSL
10 MAY 83 1315 PDT
ASCENSION NO. 225

UPPER AIR DATA
1300020Z
WHITE SANDS

GEODETLIC COORDINATES
32.40043 LAT NEG
106.37033 LONG NEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
23500.0	414.2	-24.2	15.8	579.4	614.4	236.2	1.000130
24000.0	405.8	-25.4	15.9	570.6	613.2	233.7	1.000124
24500.0	397.5	-26.7	16.0	561.8	611.6	231.3	1.000126
25000.0	389.1	-28.0	16.0	552.8	610.1	229.0	1.000124
25500.0	380.9	-29.2	16.0	544.0	608.5	228.4	1.000122
26000.0	372.9	-30.5	16.0	535.4	606.0	228.0	1.000120
26500.0	365.1	-31.8	16.0	526.9	603.3	227.4	1.000118
27000.0	357.3	-33.0	16.0	518.3	600.7	226.8	1.000116
27500.0	349.5	-34.3	16.0	509.8	602.1	226.1	1.000114
28000.0	342.0	-35.5	16.0	501.4	600.5	226.2	1.000112
28500.0	334.6	-36.8	16.0	493.1	599.0	226.3	1.000110
29000.0	327.4	-38.0	16.0	485.0	597.4	227.3	1.000108
29500.0	320.3	-39.3	15.3**	477.1	595.4	229.2	1.000106
30000.0	313.2	-40.5	10.1**	469.0	594.2	231.0	1.000105
30500.0	306.3	-41.8	4.8**	461.1	592.6	233.4	1.000103
31000.0	299.5	-43.0		453.3	591.1	235.7	1.000101
31500.0	292.8	-43.9		445.0	589.4	238.3	1.000099
32000.0	286.3	-44.9		436.9	587.6	240.7	1.000097
32500.0	279.0	-45.7		428.6	585.5	242.6	1.000095
33000.0	273.5	-46.5		420.2	583.6	244.0	1.000094
33500.0	267.2	-47.2		412.0	581.6	245.3	1.000092
34000.0	261.2	-47.9		404.0	579.7	247.7	1.000090
34500.0	255.3	-48.6		396.1	577.7	244.1	1.000088
35000.0	249.4	-49.4		388.5	575.7	243.3	1.000087
35500.0	243.6	-51.0		382.0	573.6	242.5	1.000085
36000.0	237.9	-52.6		375.7	571.5	241.9	1.000084
36500.0	232.3	-54.1		369.6	569.5	241.3	1.000082
37000.0	226.9	-55.7		363.5	567.5	240.9	1.000081
37500.0	221.6	-57.3		357.6	565.4	242.1	1.000080
38000.0	216.4	-58.8		351.8	563.3	243.3	1.000078
38500.0	211.3	-58.3		342.7	561.0	244.8	1.000076
39000.0	206.3	-57.0		332.4	558.8	246.3	1.000074
39500.0	201.4	-55.6		322.5	556.6	247.9	1.000072
40000.0	196.7	-55.1		314.2	554.4	249.5	1.000070
40500.0	192.0	-55.0		306.0	552.4	250.4	1.000068
41000.0	187.5	-54.8		299.3	550.6	250.4	1.000067
41500.0	183.1	-54.7		292.1	548.8	248.9	1.000065
42000.0	178.0	-53.8		284.0	547.0	244.7	1.000063
42500.0	174.7	-53.8		277.4	545.0	240.8	1.000062
43000.0	170.6	-54.2		271.4	543.4	241.4	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATIONS.

STATION ALTITUDE 3900.00 FEET MSL
10 MAY 83
ASCENSION NO. 225

UPPER AIR DATA
1300020Z25
WHITE SWIRDS

GEODETIC COORDINATES
32.4000°S LAT DEG
106.3700°E LONG DEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	160.6	-54.7		255.6	575.0	241.8	42.9	1.000059
44000.0	162.7	-55.1		259.9	575.3	242.5	45.0	1.000056
44500.0	150.8	-55.5		254.3	574.7	243.2	46.8	1.000057
45000.0	155.1	-56.0		248.8	574.1	243.7	48.0	1.000055
45500.0	151.5	-56.4		243.5	573.5	243.8	48.1	1.000054
46000.0	147.9	-56.9		238.3	572.9	243.9	48.2	1.000053
46500.0	144.3	-57.5		233.2	572.1	243.7	48.8	1.000052
47000.0	140.9	-58.1		228.2	571.4	243.5	49.5	1.000051
47500.0	137.5	-58.6		223.3	570.6	244.1	50.1	1.000050
48000.0	134.2	-59.2		218.6	569.8	245.5	50.8	1.000049
48500.0	131.0	-59.8		213.9	569.1	245.8	51.5	1.000048
49000.0	127.9	-60.3		209.4	568.3	246.7	52.3	1.000047
49500.0	124.9	-60.9		204.9	567.6	246.6	53.2	1.000046
50000.0	121.9	-61.5		200.5	566.8	245.2	51.3	1.000045
50500.0	118.9	-61.8		196.0	566.3	243.2	48.8	1.000044
51000.0	116.0	-62.1		191.6	565.9	241.7	46.1	1.000043
51500.0	113.2	-62.4		187.2	565.5	241.0	43.1	1.000042
52000.0	110.5	-62.8		182.9	565.1	240.1	40.2	1.000041
52500.0	107.8	-63.1		178.8	564.7	238.7	40.1	1.000040
53000.0	105.2	-62.7		174.1	565.1	237.3	40.0	1.000039
53500.0	102.6	-62.3		169.5	565.7	236.9	39.6	1.000038
54000.0	100.1	-61.8		165.1	566.3	236.9	39.1	1.000037
54500.0	97.7	-61.9		161.2	566.2	237.4	38.0	1.000036
55000.0	95.3	-62.1		157.4	566.0	239.9	35.5	1.000035
55500.0	93.0	-62.2		153.7	565.8	242.7	33.0	1.000034
56000.0	90.8	-62.4		150.0	565.6	240.6	32.1	1.000033
56500.0	88.6	-62.5		146.5	565.4	250.8	31.6	1.000033
57000.0	86.4	-62.7		143.1	565.2	252.6	30.5	1.000032
57500.0	84.3	-62.8		139.7	565.0	250.7	28.6	1.000031
58000.0	82.3	-62.5		136.0	565.7	248.7	26.8	1.000030
58500.0	80.3	-60.7		131.7	567.9	242.7	23.2	1.000029
59000.0	78.4	-61.1		128.7	567.3	230.5	18.9	1.000029
59500.0	76.5	-61.8		126.0	566.4	212.7	15.9	1.000028
60000.0	74.6	-62.4		123.4	565.5	205.6	15.1	1.000027
60500.0	72.8	-63.1		120.8	564.6	202.2	14.9	1.000027
61000.0	71.0	-63.8		118.2	563.7	204.7	14.6	1.000026
61500.0	69.3	-64.2		115.6	563.1	208.3	13.4	1.000026
62000.0	67.6	-64.3		112.8	563.0	213.6	12.1	1.000025
62500.0	66.0	-64.4		110.1	562.9	218.4	10.9	1.000025
63000.0	64.4	-60.6		105.5	560.0	216.0	9.3	1.000023

STATION ALTITUDE 3489.00 FEET MSL
10 MAY 43
ASCENSION NO. 225

UPPER AIR DATA
1500020220
WHITE SANDS

GEOMETRIC COORDINATES
32.44043 LAT DEG
106.37033 LONG DEG

TABLE 12 Contd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	62.8	-58.9		102.2	570.2	216.7	7.8	1.000023
64000.0	61.3	-59.1		99.8	570.0	209.9	7.1	1.000022
64500.0	59.9	-59.2		97.5	564.8	198.3	7.6	1.000022
65000.0	58.4	-59.0		95.1	570.1	188.5	8.4	1.000021
65500.0	57.1	-58.4		92.6	570.9	179.2	10.2	1.000021
66000.0	55.7	-57.8		90.1	571.7	172.6	12.5	1.000020
66500.0	54.4	-57.2		87.8	572.5	169.1	14.8	1.000020
67000.0	53.1	-56.6		85.4	573.3	177.3	16.6	1.000019
67500.0	51.9	-56.0		83.2	574.1	183.7	18.6	1.000019
68000.0	50.6	-55.4		81.0	574.9	184.8	17.8	1.000018
68500.0	49.4	-54.9		78.9	575.5	181.0	14.4	1.000018
69000.0	48.3	-54.5		76.9	576.1	174.8	11.1	1.000017
69500.0	47.2	-54.0		75.0	576.7	163.5	6.9	1.000017
70000.0	46.1	-53.6		73.1	577.2	127.1	3.6	1.000016
70500.0	45.0	-53.6		71.4	577.2	79.9	3.5	1.000016
71000.0	43.9	-53.8		69.8	577.0	81.1	3.4	1.000016
71500.0	42.9	-54.0		68.2	576.8	82.3	3.2	1.000015
72000.0	41.9	-54.1		66.7	576.5	95.9	4.1	1.000015
72500.0	40.9	-53.4		65.0	576.9	105.8	5.5	1.000014
73000.0	40.0	-53.4		63.4	577.6	112.9	7.1	1.000014
73500.0	39.1	-52.9		61.8	578.2	123.0	9.3	1.000014
74000.0	38.2	-52.4		60.2	578.8	129.2	11.7	1.000013
74500.0	37.3	-52.2		58.8	579.1	131.4	13.1	1.000013
75000.0	36.4	-51.9		57.4	579.4	131.5	13.6	1.000013
75500.0	35.6	-51.7		56.0	579.7	131.7	14.1	1.000012
76000.0	34.8	-51.5		54.6	580.0	128.9	13.4	1.000012
76500.0	34.0	-51.2		53.3	580.3	125.2	12.6	1.000012
77000.0	33.2	-51.0		52.0	580.7	122.9	11.6	1.000012
77500.0	32.4	-50.8		50.8	581.0	127.0	10.2	1.000011
78000.0	31.7	-50.5		49.6	581.3	132.2	8.9	1.000011
78500.0	31.0	-50.3		48.4	581.6	127.0	8.3	1.000011
79000.0	30.2	-50.1		47.2	581.9	114.3	8.6	1.000011
79500.0	29.5	-49.9		46.1	582.1	102.9	8.3	1.000010
80000.0	28.9	-49.6		45.0	582.4	98.9	9.3	1.000010
80500.0	28.2	-49.4		43.9	582.7	97.0	8.9	1.000010
81000.0	27.6	-49.2		42.9	583.0	94.9	8.5	1.000010
81500.0	27.0	-49.0		41.9	583.3	113.1	6.0	1.000009
82000.0	26.3	-48.8		40.9	583.6	157.3	4.7	1.000009
82500.0	25.7	-48.5		39.9	583.9	195.8	6.7	1.000009
83000.0	25.2	-48.3		39.0	584.1			1.000009

STATION ALTITUDE 3,890.00 FEET MSL
 10 MAY 63 1315 MDT
 ASCENSION NO. 225

UPPER AIR DATA
 1300020225
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.57033 LON DEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA		INDEX	
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	OF REFRACTION	INDEX
83500.0	24.6	-48.1			34.1	584.4				1.000008
84000.0	24.0	-47.9			37.2	584.7				1.000008
84500.0	23.5	-47.7			36.3	585.0				1.000008
85000.0	22.9	-47.4			35.4	585.3				1.000008

STATION ALTITUDE 3989.00 FEET SL
10 MAY 83
ASCENDING NO. 225

MANDATORY LEVELS
1300020225
WHITE SANDS

GEODETIC COORDINATES
32.41043 LAT DEG
106.37033 LON DEG

TABLE 13

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUMIDITY PERCENT	WIND DATA	
		AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4773.	23.2	-4.8	15.	222.3	11.2
800.0	6487.	17.9	-6.7	16.	234.1	15.7
750.0	8277.	12.2	-9.2	21.	223.9	10.8
700.0	10151.	6.1	-12.4	25.	211.4	9.6
650.0	12124.	.9	-17.9	23.	216.2	15.2
600.0	14214.	-3.2	-25.2	16.	222.2	20.2
550.0	16457.	-7.2	-30.1	14.	231.9	28.6
500.0	18870.	-12.6	-33.8	13.	243.1	28.8
450.0	21476.	-19.1	-38.8	15.	242.3	25.4
400.0	24312.	-26.3	-44.5	16.	232.1	25.0
350.0	27428.	-34.2	-51.1	16.	225.2	33.3
300.0	30903.	-42.0			235.5	35.1
250.0	34878.	-49.3			243.4	43.9
200.0	39550.	-55.2			248.3	43.2
175.0	42354.	-53.8			240.8	34.9
150.0	45583.	-56.6			243.9	48.1
125.0	49340.	-60.9			246.6	53.1
100.0	53863.	-61.8			236.9	39.1
80.0	58386.	-60.5			241.7	22.7
70.0	61091.	-64.2			208.2	14.0
60.0	64224.	-59.2			200.0	7.5
50.0	68004.	-55.1			183.3	10.2
40.0	72704.	-53.4			111.7	6.0
30.0	78832.	-50.0			111.1	8.8
25.0	82757.	-44.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
10 MAY 63 1100 MDT
ASCENSION NO. 12

SIGNIFICANT LEVEL DATA 1300220012

NW 30

TABLE 15

COORDINATES
12-08497 LAT DEG
106-49714 LONG DEG

PRESSURE, GEOMETRIC ALTITUDE MILLIBARS, MSL FEET	TEMPERATURE		WILDLIFE PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
873.7	25.6	-3.8	14.0
872.6	24.9	1.1	21.0
862.0	22.8	-2.0	19.0
855.9	22.6	-2	20.0
850.0	21.9	-1.4	21.0
841.4	18.6	-3.5	22.0
752.0	11.7	-6.2	24.0
700.0	6.0	-9.0	33.0
621.0	-3.1	-14.5	41.0
609.7	-4.2	-15.7	40.0
603.4	-4.2	-23.2	21.0
526.2	-9.9	-30.9	16.0
500.0	-13.1	-32.3	18.0
400.0	-26.3	-42.0	21.0
365.2	-31.8	-46.7	21.0
321.4	-39.0	-52.9	21.0
300.0	-42.7		
262.4	-48.8		
250.0	-49.7		
227.6	-53.4		
200.0	-53.6		
177.2	-53.4		
170.2	-52.2		
150.0	-50.3		
144.4	-50.3		
110.0	-61.4		
106.4	-59.8		
100.0	-61.1		
95.2	-58.6		
81.4	-60.4		
70.7	-58.6		
70.0	-63.3		
65.4	-62.5		
62.4	-50.3		
50.4	-50.4		
52.0	-54.0		
50.0	-53.9		
42.4	-53.6		
40.0	-48.4		
27.5	-46.8		

UPPER AIR DATA
130022001Z
NW 30
TABLE 15

STATION ALTITUDE 4010.40 FEET SL
10 MAY 63
ASCENSION NO. 12

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METR	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEG) SPEED (KNOTS)	INDEX OF REFRACTION
4910.4	873.7	25.6	-3.8	14.0	1016.8	674.0	230.0	1.000246
4500.0	858.9	22.7	-1.0	20.5	1008.8	670.4	226.7	1.000249
5000.0	843.9	21.4	-1.7	21.2	995.7	669.4	223.3	1.000245
5500.0	829.1	20.1	-2.5	21.5	982.6	667.9	220.8	1.000241
6000.0	814.6	18.9	-3.3	21.9	969.6	666.5	218.8	1.000237
6500.0	800.1	17.3	-3.9	23.1	957.5	664.7	215.7	1.000234
7000.0	785.9	15.7	-4.5	24.5	945.8	662.8	210.5	1.000231
7500.0	771.8	14.1	-5.1	25.9	934.3	660.4	207.0	1.000227
8000.0	758.1	12.4	-5.8	27.4	922.9	659.0	203.4	1.000224
8500.0	744.4	10.9	-6.5	28.7	911.2	657.2	198.3	1.000221
9000.0	730.8	9.4	-7.2	30.0	899.3	655.5	191.1	1.000217
9500.0	717.5	8.0	-8.0	31.3	887.6	653.8	185.4	1.000214
10000.0	704.4	6.5	-8.8	32.6	876.0	652.0	180.6	1.000210
10500.0	691.4	5.1	-9.5	33.8	864.3	650.3	180.0	1.000207
11000.0	678.4	3.6	-10.3	35.1	852.6	648.6	182.9	1.000204
11500.0	665.7	2.2	-11.2	36.4	841.1	646.9	187.1	1.000200
12000.0	653.3	.8	-12.0	37.6	829.7	645.2	188.7	1.000197
12500.0	641.1	-7	-12.9	38.9	818.6	643.5	192.1	1.000194
13000.0	629.1	-2.1	-13.8	40.1	807.3	641.8	196.7	1.000191
13500.0	617.2	-3.5	-14.9	40.7	796.4	640.1	203.0	1.000187
14000.0	605.4	-4.2	-20.3	27.2	783.6	639.1	208.7	1.000181
14500.0	593.8	4.9	-24.1	20.4	770.6	638.3	215.0	1.000176
15000.0	582.3	-5.7	-25.2	19.7	758.0	637.3	220.9	1.000173
15500.0	571.1	-6.5	-26.2	19.0	745.7	636.3	222.6	1.000170
16000.0	560.0	-7.3	-27.3	18.3	733.5	635.3	221.8	1.000167
16500.0	549.2	-8.1	-28.4	17.6	721.6	634.4	221.0	1.000164
17000.0	538.6	-8.9	-29.5	16.9	709.9	633.4	222.4	1.000161
17500.0	528.2	-9.7	-30.7	16.1	698.3	632.4	224.1	1.000158
18000.0	517.9	-10.9	-31.3	16.6	687.7	631.0	225.9	1.000156
18500.0	507.7	-12.1	-31.9	17.4	677.4	629.5	228.1	1.000153
19000.0	497.6	-13.4	-32.5	18.1	667.2	628.0	230.6	1.000151
19500.0	487.6	-14.6	-33.4	18.3	656.7	626.5	233.8	1.000148
20000.0	477.7	-15.8	-34.3	18.6	646.5	625.0	235.9	1.000146
20500.0	468.0	-17.0	-35.1	18.9	636.4	623.6	236.6	1.000143
21000.0	458.5	-18.2	-36.0	19.2	626.4	622.1	236.8	1.000141
21500.0	449.2	-19.4	-36.9	19.4	616.7	620.6	236.9	1.000139
22000.0	440.1	-20.6	-37.8	19.7	607.1	619.1	236.0	1.000137
22500.0	431.2	-21.9	-38.7	20.0	597.7	617.6	234.7	1.000134
23000.0	422.5	-23.1	-39.6	20.3	588.4	616.1	232.5	1.000132
23500.0	413.0	-24.3	-40.5	20.5	579.3	614.6	229.4	1.000130

STATION ALTITUDE 4010.0 F T MSL
10 MAY 73
ASCENSION NO. 12

UPPER AIR DATA
1300220012
11W 30

G. ODELTIC COORDINATES
32.84497 LAT DEG
106.49714 LONG DEG

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	405.5	-25.5	20.0	570.3	613.1	227.0	28.3	1.000128
24500.0	377.2	-26.7	21.0	561.4	611.6	225.0	28.7	1.000126
25000.0	366.0	-28.0	21.0	552.5	610.0	225.0	29.3	1.000124
25500.0	360.7	-29.3	21.0	543.7	608.4	224.8	30.2	1.000122
26000.0	372.7	-30.5	21.0	535.1	606.8	224.3	32.4	1.000120
26500.0	364.8	-31.3	21.0	526.7	605.2	223.8	35.9	1.000118
27000.0	350.9	-33.1	21.0	517.9	603.6	223.9	37.8	1.000116
27500.0	349.2	-34.3	21.0	509.4	602.1	223.9	39.0	1.000114
28000.0	341.7	-35.5	21.0	501.0	600.5	223.8	39.0	1.000112
28500.0	334.3	-36.0	21.0	492.7	599.0	224.3	41.0	1.000110
29000.0	327.1	-38.0	21.0	484.6	597.4	225.0	43.2	1.000108
29500.0	320.0	-39.2	19.7**	476.0	595.9	226.3	43.0	1.000106
30000.0	313.0	-40.4	12.9**	468.5	594.3	227.2	43.3	1.000105
30500.0	306.1	-41.6	6.1**	460.5	592.8	227.9	41.8	1.000103
31000.0	299.3	-42.8		452.6	591.3	228.8	41.7	1.000101
31500.0	292.5	-43.8		444.4	589.9	229.7	41.7	1.000099
32000.0	285.9	-44.9		436.4	588.6	229.8	43.8	1.000097
32500.0	279.5	-45.9		428.5	587.3	229.8	46.2	1.000095
33000.0	273.2	-47.0		420.8	585.9	229.6	47.0	1.000094
33500.0	267.0	-48.0		413.2	584.6	229.5	47.7	1.000092
34000.0	261.0	-48.9		405.5	583.4	230.6	48.5	1.000090
34500.0	255.0	-49.3		396.9	582.8	231.8	49.3	1.000088
35000.0	249.2	-49.8		388.7	582.2	232.9	51.7	1.000087
35500.0	243.4	-50.8		381.3	581.0	233.9	54.4	1.000085
36000.0	237.8	-51.7		374.0	579.8	233.6	56.7	1.000083
36500.0	232.3	-52.6		366.9	578.6	233.3	58.5	1.000082
37000.0	226.9	-53.4		359.7	577.5	232.9	58.4	1.000080
37500.0	221.6	-53.4		351.4	577.5	232.4	57.8	1.000078
38000.0	216.5	-53.5		343.3	577.4	232.0	56.7	1.000076
38500.0	211.4	-53.5		335.3	577.4	232.0	55.9	1.000075
39000.0	206.5	-53.6		327.0	577.3	232.4	55.2	1.000073
39500.0	201.7	-53.6		320.0	577.3	234.5	53.0	1.000071
40000.0	197.0	-53.6		312.5	577.3	238.0	49.4	1.000070
40500.0	192.4	-53.5		305.2	577.3	242.8	46.2	1.000068
41000.0	187.0	-53.5		298.0	577.4	246.0	43.5	1.000066
41500.0	183.5	-53.5		291.0	577.4	248.3	40.8	1.000065
42000.0	179.2	-53.4		284.2	577.5	248.8	38.0	1.000063
42500.0	175.1	-53.0		277.1	578.0	249.0	36.3	1.000062
43000.0	171.0	-52.3		269.8	578.4	248.0	36.0	1.000060
43500.0	167.0	-52.8		264.1	578.3	248.4	36.1	1.000059

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
10 MAY 63
ASCENSION NO. 12

UPPER AIR DATA
1300220012
NW 30

ODULTIC COORDINATES
32.00497 LAT DEG
106.49714 LONG DEG

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CM ³	SOUND SPEED METERS PER SECOND	WIND DATA DIRECTION SPEED GUSTS	INDEX OF REFRACTION
44000.0	163.1	-53.6	258.0	577.3	247.7	36.8	1.000054
44500.0	159.3	-54.3	253.6	570.3	246.5	38.8	1.000056
45000.0	155.6	-55.1	248.6	575.3	244.4	44.3	1.000055
45500.0	151.9	-55.9	243.6	574.2	242.7	49.6	1.000054
46000.0	148.4	-57.2	239.3	572.5	241.3	53.8	1.000053
46500.0	144.8	-59.1	235.7	570.0	240.3	57.3	1.000052
47000.0	141.4	-59.5	230.5	569.4	240.5	56.5	1.000051
47500.0	138.0	-59.8	225.2	569.1	240.6	55.7	1.000050
48000.0	134.6	-60.0	220.1	568.7	240.6	55.3	1.000049
48500.0	131.4	-60.3	215.0	568.4	240.7	54.3	1.000048
49000.0	128.2	-60.5	210.1	568.1	241.4	51.6	1.000047
49500.0	125.2	-60.8	205.3	567.7	242.1	49.5	1.000046
50000.0	122.2	-61.0	200.6	567.4	242.8	48.8	1.000045
50500.0	119.2	-61.3	196.0	567.0	242.7	48.4	1.000044
51000.0	116.4	-61.2	191.2	567.2	241.3	48.4	1.000043
51500.0	113.6	-60.8	186.3	567.7	239.5	48.1	1.000041
52000.0	110.8	-60.4	181.5	568.2	236.9	47.4	1.000040
52500.0	108.2	-60.1	176.8	568.7	235.5	45.8	1.000039
53000.0	105.6	-60.0	172.5	568.8	235.2	43.1	1.000038
53500.0	103.0	-60.5	168.8	568.1	236.4	40.1	1.000038
54000.0	100.5	-61.0	165.1	567.5	239.2	36.9	1.000037
54500.0	98.1	-60.1	160.5	568.6	242.0	34.2	1.000036
55000.0	95.8	-58.9	155.8	570.2	247.3	32.0	1.000035
55500.0	93.5	-58.8	152.0	570.4	250.8	30.9	1.000034
56000.0	91.3	-59.1	148.5	570.0	253.0	30.8	1.000033
56500.0	89.1	-59.4	145.1	569.6	253.9	30.6	1.000032
57000.0	86.9	-59.6	141.9	568.2	253.3	30.4	1.000032
57500.0	84.9	-59.9	138.6	568.4	252.6	29.3	1.000031
58000.0	82.0	-60.2	135.5	568.5	251.6	27.3	1.000030
58500.0	80.4	-59.8	132.0	569.0	250.7	24.9	1.000029
59000.0	78.9	-59.0	128.3	570.2	250.2	22.1	1.000029
59500.0	77.0	-59.8	125.0	569.0	247.9	19.7	1.000028
60000.0	75.2	-60.7	123.3	567.8	241.1	18.3	1.000027
60500.0	73.4	-61.6	120.8	566.6	234.3	18.2	1.000027
61000.0	71.6	-62.5	118.4	565.4	230.4	20.8	1.000026
61500.0	69.0	-63.3	116.0	564.4	228.6	23.3	1.000026
62000.0	66.2	-63.0	113.0	564.8	241.8	17.4	1.000025
62500.0	66.5	-62.7	110.1	565.2	265.6	13.3	1.000025
63000.0	64.9	-62.0	107.1	566.1	269.3	11.8	1.000024
63500.0	63.3	-60.3	103.7	568.4	308.9	11.7	1.000023

STATION ALTITUDE 4010.00 FT. MSL
10 MAY 53 1100 PDT
ASCISSION NO. 12

UPPER AIR DATA
1300220012
PW 30

GEODETIC COORDINATES
32.04497 LAT N
106.49714 LONG DEG

TABLE 15 Contd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	HUMIDITY PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED GIGS (IN) KNOTS	INDEX OF REFRACTION
64000.0	61.8	-69.2		100.7	569.6	322.0	1.000022
64500.0	60.3	-69.0		98.2	570.1	298.9	1.000022
65000.0	58.9	-68.8		95.7	570.4	259.1	1.000021
65500.0	57.5	-68.6		93.4	570.7	221.4	1.000021
66000.0	56.1	-68.1		91.0	571.2	179.1	1.000020
66500.0	54.8	-68.0		88.5	573.0	150.4	1.000020
67000.0	53.5	-65.6		85.7	574.7	148.9	1.000019
67500.0	52.3	-64.3		83.2	576.4	144.5	1.000019
68000.0	51.0	-64.0		81.1	576.8	147.3	1.000018
68500.0	49.9	-63.9		79.2	576.9	151.3	1.000018
69000.0	48.7	-63.9		77.4	576.9	155.0	1.000017
69500.0	47.6	-63.8		75.5	577.0	160.7	1.000017
70000.0	46.5	-63.8		73.8	577.0	174.4	1.000016
70500.0	45.3	-63.7		72.0	577.1	172.4	1.000016
71000.0	44.3	-63.6		70.3	577.1	168.8	1.000016
71500.0	43.3	-63.6		68.7	577.2	150.7	1.000015
72000.0	42.3	-63.6		67.1	577.3	137.1	1.000015
72500.0	41.3	-63.2		65.4	577.4	120.3	1.000015
73000.0	40.4	-62.9		63.8	578.2	107.8	1.000014
73500.0	39.4	-62.5		62.3	578.7	103.0	1.000014
74000.0	38.5	-62.2		60.7	579.1	107.0	1.000014
74500.0	37.6	-61.8		59.2	579.6	112.1	1.000013
75000.0	36.8	-61.5		57.6	580.1	115.7	1.000013
75500.0	35.9	-61.1		56.4	580.5	116.6	1.000013
76000.0	35.1	-60.8		55.0	581.0	117.8	1.000012
76500.0	34.3	-60.4		53.6	581.4	108.6	1.000012
77000.0	33.5	-60.1		52.3	581.9	98.2	1.000012
77500.0	32.7	-60.7		51.1	582.3	93.0	1.000011
78000.0	32.0	-60.4		49.8	582.6	101.3	1.000011
78500.0	31.3	-60.0		48.6	583.2	114.3	1.000011
79000.0	30.5	-60.7		47.4	583.7	135.8	1.000011
79500.0	29.8	-60.3		46.2	584.2	155.8	1.000010
80000.0	29.2	-60.9		45.1	584.7	169.1	1.000010
80500.0	28.5	-60.5		44.0	585.3		1.000010
81000.0	27.9	-60.7		42.9	585.8		1.000010

STATION ALTITUDE 4010.00 F. FT MSL
10 MAY 83
ASCENDING 10. 12

MANDATORY LEVELS
1300220012
HW 30

ODUTIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

TABLE 16

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	4793.	21.0	-1.4	21.	224.7	15.1	
800.0	6503.	17.3	-3.9	23.	213.7	15.9	
750.0	8290.	11.5	-6.3	28.	201.0	15.2	
700.0	10162.	6.0	-9.0	33.	180.3	12.3	
650.0	12133.	.4	-12.3	38.	189.1	15.2	
600.0	14218.	-4.0	-23.5	21.	211.9	27.0	
550.0	16451.	-8.1	-28.4	18.	220.9	32.3	
500.0	18859.	-13.1	-32.3	18.	229.9	28.0	
450.0	21461.	-19.3	-36.8	19.	236.9	24.5	
400.0	24205.	-26.3	-42.0	21.	220.2	20.6	
350.0	27412.	-34.2	-48.6	21.	224.0	39.0	
300.0	30888.	-42.7			220.0	41.6	
250.0	34856.	-49.7			232.8	51.3	
200.0	39583.	-53.6			235.8	51.8	
175.0	42402.	-53.0			249.0	30.3	
150.0	45650.	-56.3			242.0	51.7	
125.0	49391.	-60.8			242.1	49.5	
100.0	53947.	-61.1			239.8	30.3	
80.0	58527.	-58.9			250.5	25.8	
70.0	61251.	-63.3			228.5	23.2	
60.0	64389.	-50.0			292.9	7.9	
50.0	68184.	-53.0			150.5	15.7	
40.0	72892.	-52.7			100.0	10.3	
30.0	79015.	-48.4			181.9	15.3	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FT MSL
10 MAY 63 1230 MDT
ASCENDING NO. 74

SIGNIFICANT LEVEL DATA
13000.00074
JALLFM

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 17

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	TEMPERATURE DEWPOINT	RELATIVE HUMIDITY
IN HG	FEET	DEGREES F	DEGREES F	PERCENT
871.5	4051.0	25.5	-1.3	17.0
850.0	4760.3	22.4	-4.6	16.0
776.1	7327.0	15.6	-8.6	18.0
700.0	10154.7	6.8	-11.8	23.0
619.9	13376.4	-2.8	-16.7	28.0
585.7	14845.6	-6.0	-27.7	16.0
510.3	17912.4	-11.1	-33.2	14.0
500.0	18864.1	-13.5	-33.9	16.0
464.3	20701.9	-17.8	-36.8	17.0
400.0	24300.9	-27.4	-43.4	20.0
355.0	27026.8	-34.7	-49.6	20.0
324.2	29152.0	-39.0	-53.3	20.0
300.0	30888.1	-43.1		
250.0	34871.7	-50.1		
221.0	37416.8	-53.7		
207.9	38793.3	-54.8		
200.0	39610.7	-54.2		
172.8	42685.2	-56.3		
165.6	43578.6	-55.1		
150.0	45653.5	-56.8		
138.6	47302.3	-57.5		
126.2	49247.7	-59.0		
122.0	49947.2	-59.4		
106.2	52794.8	-61.9		
103.0	53419.7	-61.6		
100.0	54022.2	-62.9		
80.0	56626.7	-61.8		
79.7	58667.6	-58.3		
76.0	61322.3	-63.3		
65.3	62740.5	-64.0		
60.4	64339.3	-58.5		
55.4	66133.7	-58.5		
52.0	67294.9	-50.8		
50.0	68290.1	-55.0		
30.0	73554.7	-53.5		

STATION ALTITUDE 4051.00 FEET SL
10 MAY 83 1230 MDT
ASCENDING NO. 74

UPPER AIR DATA
1300030074
JALLFN

TABLE 18

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METR	SPEED OF WIND KNOTS	WIND DATA		INDEX OR REFRACTION
							DIRECTION (TRUE)	SPEED KNOTS	
4051.0	871.5	25.5	-1.3	17.0	1014.1	674.1	240.0	15.9	1.000250
4500.0	857.9	23.6	-3.4	16.4	1005.2	671.8	237.0	16.1	1.000244
5000.0	843.0	21.8	-5.0	16.2	993.8	669.7	235.7	16.3	1.000240
5500.0	828.1	20.5	-5.7	16.6	980.8	668.1	233.5	16.5	1.000236
6000.0	813.6	19.1	-6.5	17.0	968.0	666.6	231.4	16.7	1.000232
6500.0	799.2	17.8	-7.3	17.4	955.4	665.1	229.3	17.0	1.000229
7000.0	735.2	16.5	-8.1	17.7	942.9	663.5	227.3	17.3	1.000225
7500.0	771.2	15.1	-8.7	18.4	930.7	661.9	225.3	17.6	1.000222
8000.0	757.3	13.5	-9.2	19.7	918.9	660.1	223.4	17.9	1.000219
8500.0	743.6	11.9	-9.7	20.0	907.2	658.3	221.5	18.3	1.000216
9000.0	730.1	10.4	-10.3	22.1	895.8	656.5	225.6	18.6	1.000213
9500.0	716.9	8.8	-10.9	23.4	884.4	654.7	225.7	18.9	1.000210
10000.0	704.0	7.3	-11.0	24.6	873.3	652.8	223.9	19.2	1.000207
10500.0	690.9	5.8	-12.5	25.3	861.9	651.0	220.9	19.5	1.000203
11000.0	678.0	4.3	-13.0	25.8	850.4	649.3	217.9	19.9	1.000200
11500.0	665.4	2.8	-14.7	26.3	839.1	647.5	215.4	20.7	1.000197
12000.0	652.9	1.3	-15.7	26.7	827.9	645.7	213.2	21.6	1.000193
12500.0	640.7	-0.2	-16.8	27.2	816.9	644.0	211.1	22.5	1.000190
13000.0	628.8	-1.7	-17.9	27.6	806.1	642.2	214.3	23.3	1.000187
13500.0	616.9	-3.1	-19.4	27.0	795.1	640.5	210.0	24.1	1.000184
14000.0	605.1	-4.2	-22.2	22.0	783.2	639.2	219.0	24.7	1.000180
14500.0	593.6	-5.2	-25.3	18.1	771.5	637.8	221.8	25.4	1.000176
15000.0	582.2	-6.3	-28.0	15.0	759.6	636.6	226.0	25.9	1.000172
15500.0	570.9	-7.1	-28.9	15.6	747.2	635.6	223.8	26.6	1.000169
16000.0	559.8	-7.9	-29.8	15.2	735.0	634.6	230.8	27.4	1.000166
16500.0	548.9	-8.8	-33.7	14.0	723.0	633.6	230.9	27.4	1.000164
17000.0	538.2	-9.6	-31.0	14.6	711.2	632.6	229.5	28.4	1.000161
17500.0	527.8	-10.4	-32.5	14.3	699.6	631.6	228.0	28.8	1.000158
18000.0	517.5	-11.3	-33.3	14.2	688.3	630.5	228.1	29.6	1.000155
18500.0	507.3	-12.6	-33.0	15.2	676.1	628.9	226.8	27.4	1.000153
19000.0	497.3	-13.8	-30.1	16.1	667.8	627.4	230.7	25.3	1.000151
19500.0	487.3	-15.0	-30.9	15.3	657.5	626.0	232.9	24.1	1.000148
20000.0	477.6	-16.2	-36.7	16.6	647.2	624.6	235.4	23.7	1.000146
20500.0	468.1	-17.3	-36.5	16.0	637.3	623.2	236.8	24.2	1.000143
21000.0	458.6	-18.6	-37.3	17.2	627.5	621.6	236.0	26.1	1.000141
21500.0	449.2	-19.0	-38.2	17.7	617.9	620.0	236.7	28.0	1.000139
22000.0	440.0	-21.3	-39.1	19.1	608.4	618.4	237.0	28.8	1.000137
22500.0	431.0	-22.6	-40.0	18.1	599.1	617.7	237.2	29.6	1.000135
23000.0	422.1	-23.9	-41.0	18.0	590.0	615.1	237.2	30.2	1.000132
23500.0	413.5	-25.3	-41.0	17.1	581.0	613.4	236.6	29.9	1.000130

STATION ALTITUDE 4051.00 FEET MSL
10 MAY 73
ASCENSION NO. 74

UPPER AIR DATA
1300030074
JALLIN
TABLE 15 Cont'd

GEODETIC COORDINATES
33.1-712 LAT DEG
106.49511 LONG DEG

GEOMETRIC ALTITUDE, MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KILOTS	WIND DATA DIRECTION (DEGREES TRUE) SPEED KILOTS	INDEX OF REFRACTION
24000.0	405.0	-20.6	19.7	572.2	611.8	230.0	1.000128
24500.0	390.6	-27.9	20.0	563.4	610.1	234.8	1.000126
25000.0	380.2	-29.3	20.0	554.5	608.4	233.1	1.000124
25500.0	380.0	-30.6	20.0	545.7	606.7	230.6	1.000122
26000.0	371.9	-32.0	20.0	537.1	605.1	227.3	1.000120
26500.0	364.0	-33.3	20.0	528.7	603.4	224.6	1.000118
27000.0	350.3	-34.6	20.0	520.4	601.7	224.3	1.000116
27500.0	340.6	-35.7	20.0	511.3	600.4	223.0	1.000114
28000.0	341.0	-36.7	20.0	502.3	599.1	220.4	1.000112
28500.0	333.6	-37.7	20.0	493.5	597.4	225.7	1.000110
29000.0	326.4	-38.7	20.0	484.9	596.5	225.2	1.000108
29500.0	319.2	-39.8	16.0**	476.6	595.1	225.6	1.000106
30000.0	312.1	-41.0	10.2**	468.4	593.6	226.6	1.000104
30500.0	305.2	-42.2	4.5**	460.4	592.1	228.4	1.000103
31000.0	298.5	-43.3		452.4	590.6	229.4	1.000101
31500.0	291.7	-44.2		443.6	589.5	230.3	1.000099
32000.0	285.1	-45.1		435.4	588.4	231.1	1.000097
32500.0	278.7	-45.9		427.2	587.2	231.6	1.000095
33000.0	272.4	-46.8		419.2	586.1	231.7	1.000093
33500.0	266.2	-47.7		411.3	585.0	233.4	1.000092
34000.0	260.2	-48.6		403.6	583.8	236.2	1.000090
34500.0	254.3	-49.4		396.0	582.7	239.0	1.000088
35000.0	248.5	-50.3		388.4	581.6	241.7	1.000087
35500.0	242.7	-51.0		380.6	580.7	243.1	1.000085
36000.0	237.1	-51.7		373.0	579.7	242.4	1.000083
36500.0	231.6	-52.4		365.6	578.8	241.4	1.000081
37000.0	226.3	-53.1		358.2	577.9	242.1	1.000080
37500.0	221.0	-53.8		351.0	577.0	241.0	1.000078
38000.0	215.9	-54.2		343.4	576.5	241.1	1.000076
38500.0	210.8	-54.6		336.0	576.0	240.4	1.000075
39000.0	205.9	-54.6		328.2	575.4	239.7	1.000073
39500.0	201.1	-54.3		320.0	575.0	240.2	1.000071
40000.0	196.3	-54.5		312.8	576.1	241.9	1.000070
40500.0	191.7	-54.8		305.0	575.7	243.5	1.000068
41000.0	187.2	-55.1		299.2	575.2	244.0	1.000067
41500.0	182.8	-55.5		292.6	574.8	244.6	1.000065
42000.0	178.5	-55.8		286.2	574.3	242.2	1.000064
42500.0	174.3	-56.2		279.9	573.9	239.7	1.000062
43000.0	170.2	-56.9		272.9	574.2	237.8	1.000061
43500.0	166.2	-57.2		265.7	575.1	236.5	1.000059

** AT LAST ONE ASSUMED TO BE LATITUDE RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 9001.00 FT MSL
10 MAY 83 1230 MDT
ASCENDING 110. 76

UPPER AIR DATA
1300030074
JALLIN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 18 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	WIND DIRECTION DEGREES TRUE	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	162.3	-15.4	259.7	235.0	1.000058
44500.0	156.5	-15.9	254.1	235.5	1.000057
45000.0	154.7	-16.3	248.0	235.4	1.000055
45500.0	151.1	-16.7	243.2	235.3	1.000054
46000.0	147.5	-16.9	237.7	235.1	1.000053
46500.0	144.0	-17.2	232.5	234.4	1.000052
47000.0	140.6	-17.4	227.0	233.2	1.000051
47500.0	137.3	-17.7	221.9	234.9	1.000049
48000.0	134.0	-18.0	217.0	237.5	1.000048
48500.0	130.8	-18.4	212.3	241.7	1.000047
49000.0	127.7	-18.8	207.0	247.0	1.000045
49500.0	124.7	-19.1	202.9	251.2	1.000045
50000.0	121.7	-19.4	198.4	255.2	1.000044
50500.0	118.6	-19.9	194.0	259.5	1.000043
51000.0	115.9	-20.3	189.7	251.6	1.000042
51500.0	113.1	-20.8	185.5	247.1	1.000041
52000.0	110.4	-21.2	181.4	242.6	1.000040
52500.0	107.7	-21.6	177.4	238.0	1.000040
53000.0	105.1	-21.8	173.3	234.1	1.000039
53500.0	102.6	-21.6	169.1	230.4	1.000038
54000.0	100.1	-22.0	165.0	226.0	1.000037
54500.0	97.7	-22.7	161.7	241.3	1.000036
55000.0	95.3	-22.5	157.0	244.5	1.000035
55500.0	93.0	-22.3	153.6	247.8	1.000034
56000.0	90.7	-22.1	149.8	240.2	1.000033
56500.0	88.5	-21.9	146.0	244.8	1.000033
57000.0	86.4	-21.2	142.0	243.4	1.000032
57500.0	84.3	-20.3	138.0	247.3	1.000031
58000.0	82.3	-19.4	134.2	246.3	1.000030
58500.0	80.4	-18.6	130.5	246.0	1.000029
59000.0	78.4	-18.0	127.5	247.8	1.000028
59500.0	76.5	-19.0	125.0	248.7	1.000028
60000.0	74.7	-19.8	122.5	249.6	1.000027
60500.0	72.9	-19.7	120.1	250.6	1.000027
61000.0	71.1	-19.7	117.8	249.8	1.000026
61500.0	69.4	-19.4	115.5	247.5	1.000026
62000.0	67.7	-19.6	112.6	244.0	1.000025
62500.0	66.1	-19.5	110.0	243.0	1.000024
63000.0	64.5	-19.1	106.9	242.9	1.000024
63500.0	62.9	-19.4	103.5	241.4	1.000023

STATION ALTITUDE 4051.00 FT MSL
10 MAY 63 1230 MOT
ASCENSION NO. 74

REFLEX AIR DATA
1300030074
JALLER

REFLEX COORDINATES
33.1.712 LAT N 16
106.49.111 LONG W 6

TABLE 13 CONCLD

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TR)	WIND DATA SPEED KNOTS	REFLEX OR REFERENCE
64000.0	61.4	-54.7		100.2	560.2	299.0	15.1	1.000022
64500.0	59.9	-54.5		97.5	570.4	236.5	12.7	1.000022
65000.0	58.5	-54.5		95.0	570.8	228.7	10.4	1.000021
65500.0	57.1	-54.5		92.7	570.6	204.8	6.9	1.000021
66000.0	55.6	-54.5		90.5	570.8	180.5	6.0	1.000020
66500.0	54.0	-57.3		87.9	572.3	153.0	9.2	1.000020
67000.0	53.2	-55.8		85.2	574.4	108.6	14.3	1.000019
67500.0	51.9	-54.8		82.8	575.6	102.0	19.3	1.000018
68000.0	50.7	-54.9		80.4	575.5	118.9	15.2	1.000018
68500.0	49.5	-54.9		79.6	575.5	143.9	13.1	1.000018
69000.0	48.0	-54.8		77.1	575.7	104.6	12.8	1.000017
69500.0	47.2	-54.7		75.5	575.9	167.3	10.5	1.000017
70000.0	46.1	-54.5		73.9	576.0	171.7	8.3	1.000016
70500.0	45.0	-54.4		71.7	576.2	176.5	7.1	1.000016
71000.0	44.0	-54.2		70.0	576.4	180.5	6.7	1.000016
71500.0	43.0	-54.1		68.5	576.6	185.0	6.0	1.000015
72000.0	42.0	-53.9		66.7	576.8			1.000015
72500.0	41.0	-53.8		65.1	577.0			1.000014
73000.0	40.0	-53.7		63.5	577.2			1.000014
73500.0	39.1	-53.5		62.0	577.4			1.000014

STATION ALTITUDE 4051.00 FEET SL
10 MAY 63 1230 MDT
ASCENSION NO. 74

NAVIGATORY LEVELS
1300030074
JALLEN

GEODETIC COORDINATES
53-1-712 LAT N 06 G
106-49-11 LONG W 11 G

TABLE 10

PRESSURE OF POTENTIAL		TEMPERATURE		REL. HUMID. PERCENT	WIND DIRECTION	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DEGREES (TR)	KNOTS
850.0	4763.	22.4	-4.6	16.	230.7	10.2
900.0	6475.	17.9	-7.2	17.	224.4	17.0
750.0	6267.	17.7	-7.5	20.	225.5	15.1
700.0	10145.	6.8	-11.8	25.	223.0	14.3
650.0	12121.	.9	-16.0	27.	212.7	21.0
600.0	14208.	-4.6	-23.5	21.	220.2	25.0
550.0	16436.	-8.7	-30.9	15.	231.0	27.3
500.0	18639.	-13.5	-33.9	16.	230.1	29.9
450.0	21437.	-19.8	-39.2	16.	236.8	27.8
400.0	24262.	-27.4	-43.4	20.	235.5	24.5
350.0	27363.	-35.5	-50.3	20.	224.0	37.2
300.0	30829.	-43.1			229.2	36.8
250.0	34708.	-50.1			240.9	41.4
200.0	39519.	-56.2			240.5	42.6
175.0	42316.	-56.1			240.2	34.3
150.0	45534.	-56.8			235.5	59.6
125.0	49307.	-59.1			250.9	47.6
100.0	53859.	-62.0			238.6	49.7
80.0	59400.	-58.4			247.0	20.4
70.0	61126.	-63.3			248.4	20.7
60.0	64251.	-56.5			236.8	12.8
50.0	69038.	-55.0			130.0	13.7
40.0	72730.	-53.7				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

DATE
ILME